AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Original) A method for reducing a sulfur-containing compound by hydrogenation, the method comprising the steps of:

hydrogenating the sulfur-containing compound using a noble metal catalyst at a reaction temperature of 150°C to 300°C;

recovering the used noble metal catalyst; and reusing the noble metal catalyst.

- 2. (Original) The method according to claim 1, wherein the noble metal catalyst comprises palladium.
- 3. (Original) The method according to claim 1, wherein an alcohol of 1 to 8 carbon atoms is used as a reaction solvent in the step of hydrogenating the sulfurcontaining compound.
- 4. (Currently amended) The method according to any one of claims 1 to claim 3, wherein the sulfur-containing compound is a thiophene compound.
- 5. (Original) The method according to claim 4, wherein the thiophene compound is a thiophene amide.
 - 6. (Original) The method according to claim 5, wherein the thiophene

amide is represented by general formula (1):

$$\begin{array}{c|c}
O \\
R1 \\
H \\
R2 \\
R3
\end{array}$$
(1)

(wherein R represents a hydrogen atom, a substituted or unsubstituted alkyl group, a substituted or unsubstituted alkoxy group, a substituted or unsubstituted aromatic hydrocarbon ring, a substituted or unsubstituted nonaromatic hydrocarbon ring, a substituted or unsubstituted aromatic heterocycle, or a substituted or unsubstituted nonaromatic heterocycle; R1, R2, R3, and R4 independently represent a hydrogen atom, or a linear or branched alkyl group of 1 to 12 carbon atoms; and R1 and R2, R3 and R4, R1 and R3, R1 and R4, R2 and R3, or R2 and R4 may be bonded together to form a cycloalkyl group), and an alkenyl group of the compound represented by general formula (1) is reduced by hydrogenation to produce a 2-alkyl-3-aminothiophene derivative represented by general formula (2):

$$\begin{array}{c|c}
O \\
R1 \\
H
\\
R2 \\
R3
\end{array}$$
(2)

(wherein R, R1, R2, R3, and R4 are as defined above).

7. (Original) The method according to claim 6, wherein R in the compounds represented by general formula (1) and general formula (2) is a hydrogen atom, a substituted or unsubstituted alkyl group, a substituted or unsubstituted alkoxy group, or a substituted or unsubstituted phenyl group.

8. (Original) The method according to claim 6, wherein R in the compounds represented by general formula (1) and general formula (2) is a group represented by general formulae (A1) to (A12):

(wherein R5 represents a trifluoromethyl group, a difluoromethyl group, a methyl group, an ethyl group, a hydrogen atom, or a halogen atom; R6 represents a hydrogen atom, a methyl group, a trifluoromethyl group, a halogen atom, a methoxy group, or an amino group; R7 represents a hydrogen atom, a halogen atom, a methyl group, or a methoxy group; R8 represents a hydrogen atom, a methyl group, an ethyl group, or a halogen atom; and n represents an integer of 0 to 2; however, in general formulae (A9), (A10), and (A11), R5 does not represent a halogen atom).

9. (Original) The method according to claim 8, wherein R in the compounds represented by general formula (1) and general formula (2) is represented by general formula (A1) in which R5 is a trifluoromethyl group and R7 is a hydrogen atom.

- 10. (Original) The method according to claim 6, wherein each of R1, R2, and R3 in the compound represented by general formula (2) is a hydrogen atom and R4 in the compound represented by general formula (2) is an isopropyl group.
- 11. (New) The method according to claim 2, wherein the sulfur-containing compound is a thiophene compound.
- 12. (New) The method according to claim 11, wherein the thiophene compound is a thiophene amide.
- 13. (New) The method according to claim 12, wherein the thiophene amide is represented by general formula (1):

$$\begin{array}{c|c}
O \\
R1 \\
H
\\
R2 \\
R3
\end{array}$$
(1)

(wherein R represents a hydrogen atom, a substituted or unsubstituted alkyl group, a substituted or unsubstituted alkoxy group, a substituted or unsubstituted aromatic hydrocarbon ring, a substituted or unsubstituted nonaromatic hydrocarbon ring, a substituted or unsubstituted aromatic heterocycle, or a substituted or unsubstituted nonaromatic heterocycle; R1, R2, R3, and R4 independently represent a hydrogen atom, or a linear or branched alkyl group of 1 to 12 carbon atoms; and R1 and R2, R3 and R4, R1 and R3, R1 and R4, R2 and R3, or R2 and R4 may be bonded together to form a cycloalkyl group), and an alkenyl group of the compound represented by general formula (1) is reduced by hydrogenation to produce a 2-alkyl-3-aminothiophene derivative represented by general formula (2):

(wherein R, R1, R2, R3, and R4 are as defined above).

- 14. (New) The method according to claim 13, wherein R in the compounds represented by general formula (1) and general formula (2) is a hydrogen atom, a substituted or unsubstituted alkyl group, a substituted or unsubstituted alkoxy group, or a substituted or unsubstituted phenyl group.
- 15. (New) The method according to claim 13, wherein R in the compounds represented by general formula (1) and general formula (2) is a group represented by general formulae (A1) to (A12):

(wherein R5 represents a trifluoromethyl group, a difluoromethyl group, a methyl group, an ethyl group, a hydrogen atom, or a halogen atom; R6 represents a

hydrogen atom, a methyl group, a trifluoromethyl group, a halogen atom, a methoxy group, or an amino group; R7 represents a hydrogen atom, a halogen atom, a methyl group, or a methoxy group; R8 represents a hydrogen atom, a methyl group, an ethyl group, or a halogen atom; and n represents an integer of 0 to 2; however, in general formulae (A9), (A10), and (A11), R5 does not represent a halogen atom).

- 16. (New) The method according to claim 15, wherein R in the compounds represented by general formula (1) and general formula (2) is represented by general formula (A1) in which R5 is a trifluoromethyl group and R7 is a hydrogen atom.
- 17. (New) The method according to claim 13, wherein each of R1, R2, and R3 in the compound represented by general formula (2) is a hydrogen atom and R4 in the compound represented by general formula (2) is an isopropyl group.
- 18. (New) The method according to claim 1, wherein the sulfur-containing compound is a thiophene compound.
- 19. (New) The method according to claim 18, wherein the thiophene compound is a thiophene amide.
- 20. (New) The method according to claim 19, wherein the thiophene amide is represented by general formula (1):

(wherein R represents a hydrogen atom, a substituted or unsubstituted alkyl group, a substituted or unsubstituted alkoxy group, a substituted or unsubstituted aromatic hydrocarbon ring, a substituted or unsubstituted nonaromatic hydrocarbon ring, a substituted or unsubstituted aromatic heterocycle, or a substituted or unsubstituted nonaromatic heterocycle; R1, R2, R3, and R4 independently represent a hydrogen atom, or a linear or branched alkyl group of 1 to 12 carbon atoms; and R1 and R2, R3 and R4, R1 and R3, R1 and R4, R2 and R3, or R2 and R4 may be bonded together to form a cycloalkyl group), and an alkenyl group of the compound represented by general formula (1) is reduced by hydrogenation to produce a 2-alkyl-3-aminothiophene derivative represented by general formula (2):

(wherein R, R1, R2, R3, and R4 are as defined above).

21. (New) The method according to claim 20, wherein R in the compounds represented by general formula (1) and general formula (2) is a hydrogen atom, a substituted or unsubstituted alkyl group, a substituted or unsubstituted alkoxy group, or a substituted or unsubstituted phenyl group.

22. (New) The method according to claim 20, wherein R in the compounds represented by general formula (1) and general formula (2) is a group represented by general formulae (A1) to (A12):

(wherein R5 represents a trifluoromethyl group, a difluoromethyl group, a methyl group, an ethyl group, a hydrogen atom, or a halogen atom; R6 represents a hydrogen atom, a methyl group, a trifluoromethyl group, a halogen atom, a methoxy group, or an amino group; R7 represents a hydrogen atom, a halogen atom, a methyl group, or a methoxy group; R8 represents a hydrogen atom, a methyl group, an ethyl group, or a halogen atom; and n represents an integer of 0 to 2; however, in general formulae (A9), (A10), and (A11), R5 does not represent a halogen atom).

23. (New) The method according to claim 22, wherein R in the compounds represented by general formula (1) and general formula (2) is represented by general formula (A1) in which R5 is a trifluoromethyl group and R7 is a hydrogen atom.

24. (New) The method according to claim 20, wherein each of R1, R2, and R3 in the compound represented by general formula (2) is a hydrogen atom and R4 in the compound represented by general formula (2) is an isopropyl group.